

## APPARATUS AND METHOD FOR SCANNING A SURFACE

### Abstract of the Disclosure

5           Apparatus and method for scanning a surface. An optical system generates a light beam to illuminate a surface. A carrier supports the surface for reciprocating motion with respect to the light beam to form one axis of a raster. A propulsion system moves the carrier at a substantially constant speed and a position sensor provides an output signal representing the surface position with respect to the light  
10 beam. A control system responsive to the output signal modulates a sample period reciprocally to carrier speed to achieve substantially constant scan length per sample and to control data acquisition timing.

15